WHAT IS CLAIMED IS:

1. A communication control unit mounted on an information-processing apparatus communicating with other apparatuses each serving as a node of a network through said network connecting said apparatuses with each other and used for controlling communications between said information-processing apparatus with said other apparatuses through said network, said communication control unit comprising:

a transmission-speed storage means for storing a transmission speed at which data is to be communicated with other nodes connected to said network;

a transmission-speed-information-acquiring means for acquiring transmission-speed information on a transmission speed set in another node connected to said network for communicating data from said other node; and

a transmission-speed-setting means for setting a predetermined transmission speed in said transmission-speed storage means in advance, comparing said predetermined transmission speed set in said transmission-speed storage means in advance with said acquired transmission-speed information on a transmission speed set in another node connected to said network and carrying out transmission-speed-setting/updating

processing to update a transmission speed stored in said transmission-speed storage means on the basis of a result of comparison.

2. A communication control unit according to claim 1 wherein said transmission-speed-setting means compares a transmission speed set in said transmission-speed storage means with acquired transmission-speed information on a transmission speed set in another node connected to said network and, if said transmission speed described in said acquired transmission-speed information is found lower than said transmission speed set in said transmission-speed storage means, said transmission speed described in said acquired transmission-speed information is used for updating said transmission speed set in said transmission-speed storage means.

3. A communication control unit according to claim 1 wherein:

said network is a network conforming to IEEE-1394 specifications;

said transmission-speed-information-acquiring means acquires a self-ID packet from each of said nodes connected to said network right after occurrence of a bus-reset prescribed in said IEEE-1394 specifications; and

every time said transmission-speed-information-acquiring means acquires a self-ID packet from any one of said nodes, said transmission-speed-setting means carries out transmission-speed-setting/updating processing to update setting of a transmission speed stored in said transmission-speed storage means by using transmission-speed information included in said self-ID packet.

4. A communication control unit according to claim 1 wherein said transmission-speed-information-acquiring means comprises:

a node-identification-information-receiving means for receiving information on a node identification used for identifying another node from said other node transmitting said information in accordance with a predetermined protocol; and

a transmission-speed-information-extracting means for extracting transmission-speed information on a transmission speed which said other node is capable to keep up with, from said information on a node identification.

5. A communication control unit according to claim 4 wherein

said network is a network conforming to IEEE-1394 specifications; and

said information on a node identification is included in a self-ID packet prescribed by said IEEE-1394 specifications.

6. A communication control method adopted by a communication control unit mounted on an information-processing apparatus communicating with other apparatuses each serving as a node of a network through the network connecting said apparatuses with each other and used for controlling communications between said information-processing apparatus with said other apparatuses through said network, said communication control method comprising the steps of:

setting a transmission speed at which data is to be communicated with other nodes connected to said network in advance;

acquiring transmission-speed information on a transmission speed set in another node connected to said network for communicating data from said other node;

comparing said predetermined transmission speed set in advance with said acquired transmission-speed information on a transmission speed set for communicating data in said other node;

selecting an optimum transmission speed in accordance with a result of comparison and, if necessary,

setting said selected optimum transmission speed to update said predetermined transmission speed set in advance; and

repeatedly carrying out the processing starting with the step of acquiring transmission-speed information on a transmission speed if there is a further node, from which transmission-speed information on a transmission speed has not been acquired.